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ABSTRACT

A socio-educational model of second language learning suggests that the learning of a second language involves both an ability and a motivational component and that the major basis of this motivation is best viewed from a social psychological perspective. The motivational component is influenced to some extent by factors that affect an individual's willingness to accept "foreign" behavior patterns. Language is an important part of one's own identity, and the extent to which one can incorporate another language successfully is related to a variety of attitudinal variables involving ethnic relations, as well as ability and linguistic factors. The major operative construct in the socio-educational model is motivation, and it is possible that the cultural milieu in which language learning takes place will influence which attitudinal variables serve as basic supports for this motivation. A three-page reference list and three figures are appended. (MSE)

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Second language acquisition: A social psychological perspective

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Presented at the 93rd Annual Convention of the American Psychological Association at Los Angeles, California, August, 1985

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Second language acquisition: A social psychological perspective

Robert C. Gardner and Richard N. Lalonde

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Our paper is the only one in this session that is not concerned directly with bilingualism, and I would like to make this clear at the outset. It is quite possible that some, maybe many, of the students that we have investigated over the years go on to develop bilingual competence, but when we investigate them they are, by and large, speakers, listeners, readers, and writers of only one language who happen to be enrolled in a class studying another language, typically French. The majority of the students that we have investigated are native English speaking. They are learning French, not in immersion programs, but rather in French-as-a-second-language programs. For example, we conduct many of our studies in London, Ontario, and until relatively recently French was begun in the public system there at the grade 7 level and lasted 40 minutes per day. (It now begins in grade 5 in most schools.) Furthermore, these students, like many we study, are learning a language that is not commonly heard in their city. This is by way of an introduction to make it clear that there really isn't very much difference between the majority of the children that we have investigated and many children in many other cities across this continent.

My intent today is to discuss three aspects of our research. First, I would like to outline the basic premise underlying our investigations and briefly allude to the nature of the general data that

support that premise. Second, I would like to describe the fundamentals of our socio-educational model of second language acquisition (Gardner, 1981) and review data relevant to it as a whole. And third, I would like to consider some specific predictions that derive from aspects of the model and briefly describe research relevant to these.

Underlying Rationale

The basic premise underlying much of our research is that learning a second (or foreign) language involves two types of tasks, one a cognitive one, and the other an emotional one. On the one hand, another language is simply another code -- a set of words, grammatical principles, pronunciations and the like, and as such learning this other code is much like learning any skill. Those with high levels of the requisite abilities will learn the material more readily (other things being equal) than those with lower levels of these abilities. That is, there is a cognitive or ability component involved in learning another language. This is often identified in the research literature as an aptitude for languages (e.g., Carroll, 1963; Lambert, 1963a).

On the other hand, another language is also an aspect of behavior that is characteristic of another ethnolinguistic community. The words, grammatical principles, pronunciations and the like are characteristics of another cultural community -- not one's own group, but another group (cf., Guiora, 1985). Because of this, a host of affective (or emotional) variables are also important in the language learning process. Examples of such variables are attitudes toward the other group, toward other groups in general, and toward the language learning

situation, etc. This has been referred to, in the research literature, as the attitudinal component (Lambert, 1963b).

One of the first studies to investigate both classes of variables at the same time was conducted by Gardner and Lambert (1959) in Montreal. In a factor analytic investigation of a series of attitudinal and motivational measures, tests of language aptitude and indices of French achievement, we obtained four orthogonal factors, two of which are relevant to the current discussion. Factor I was identified as a Linguistic Aptitude factor because it was identified by subscales of the Modern Language Aptitude Test (MLAT)(Carroll and Sapon, 1959), measures of verbal ability and the measure of French achievement. Factor II was defined as a motivation factor. This factor was described as a "motivation of a particular type, characterized by a willingness to be like valued members of the language community" (Gardner & Lambert, 1959, p. 271). This characterization was used because the measures contributing to this factor were measures of Motivational Intensity to learn French, an Integrative Orientation to learn French, favorable attitudes toward French Canadians, and the measure of French achievement. The two factors were clearly orthogonal to one another, but since the measure of French achievement contributed to both dimensions, we argued that there were two factors involved in the acquisition of a second language (language aptitude - or an ability dimension and motivation - or an affective dimension).

Over the years, we have been concerned with improving the reliability and testing the construct validity of our various measures of attitudes and motivation which are, of course, based on verbal report. In general, we, and others using our measures, have obtained

comparable results in many different contexts in that indices of second language achievement have been shown to relate to both aptitude and attitudinal/motivational factors. Much of this research has been published in various sources, and is described in some detail by Gardner (1985). In this respect, we have data on the role of aptitude and motivational factors on samples of elementary and secondary school students learning French-as-a-second-language in the Canadian provinces of Quebec (Gardner, 1960; Gardner & Lambert, 1959), Ontario (Gardner & Smythe, 198;; Smythe, Stennett & Feenstra, 1972), British Columbia, Alberta, Manitoba and New Brunswick (Gardner, Smythe & Lalonde, 1984), as well as the states of Maine, Louisiana and Connecticut (Gardner & Lambert, 1972). In addition, studies have been conducted with comparable results on students of English-as-a-second-language in Quebec (Clément, Gardner & Smythe, 1977; 1980), Ontario (Clément, Major, Gardner & Smythe, 1977), Finland (Laine, 1977), the Philippines (Gardner & Lambert, 1972), and Belize (in the Caribbean)(Gordon, 1980), and on students of Spanish-as-a-second-language in Pennsylvania (Muchnick & Wolfe, 1982). More recently we have extended our research to university level students in both short-term immersion programs in Quebec and regular university level courses in Ontario and Saskatchewan (e.g., Gardner, Lalonde & Pierson, 1983; Gliksman, 1981; Lalonde & Gardner, 1984).

All of these studies have used versions or modifications of our Attitude/Motivation Test Battery (Gardner, Clément, Smythe & Smythe, 1979), and in general have employed factor analytic techniques. The results have shown associations between second language achievement on

the one hand and dimensions of language aptitude and attitudes and motivation on the other. Moreover, the aptitude and attitudinal/motivational dimensions have tended to be independent. It should be emphasized that, although factor analytic techniques have been used, these results have generally been interpreted in a particular cause-effect fashion. That is, the factor analytic results have been interpreted as suggesting that achievement in a second language is mediated or facilitated by two independent components, language aptitude, on the one hand, and attitudes and motivation, on the other.

The Socio-Educational Model

In attempting to formulate a consistent theoretical model to account for the relationships observed in the factor analytic studies, we have proposed what has been labelled the socio-educational model of second language acquisition. This model proposes, first of all, that the motivation to learn a second language is characterized by three aspects, the desire (or Wanting) to learn the language, the motivational intensity (or effort expended) to learn the language, and the affective reactions (or attitudes) toward learning the language. This tri-partite complex is what we refer to as Motivation, and we argue that all three elements are necessary to adequately reflect motivation. Simply wanting a goal is not sufficient to qualify as motivation. Working hard is not sufficient to indicate motivation. And, enjoying the activity in and of itself does not signify motivation. A motivated individual is one who desires to achieve a goal, works hard to achieve that goal, and enjoys the activity involved.

The socio-educational model postulates that this motivation is caused by or, if you prefer, influenced by, at least two attitudinal constructs. One of these we label Integrativeness to indicate that it reflects an open or willing perspective with respect to other ethnic groups in general and the target language group specifically. To measure various aspects of Integrativeness, we use assessments of attitudes toward the language community, an interest in learning the language to permit integration or socialization with the other community, a general openness to other ethnic groups and languages, an absence of ethnocentrism, etc. The other attitudinal precursor to motivation we label as Attitudes toward the Learning Situation. That is, to the extent that the major opportunity to learn the second language is a classroom environment, it seems reasonable to propose that evaluative reactions to the language teacher, toward the language course, and toward the materials, etc., will influence the student's level of motivation to learn the language. Note, therefore, that this model does not rule out the potential role of the teacher and the classroom environment in motivating the student. Both socially relevant attitudes and educationally relevant attitudes are viewed as important in motivating students. In much of our research we often label this three-way combination of Integrativeness, Attitudes toward the Learning Situation and Motivation as an Integrative Motive largely to point out its attitudinal and motivational components.

In the socio-educational model, we argue that language aptitude and

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Insert Figure 1 about here

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motivation are the major variables instrumental in promoting success in learning a second language. Language aptitude, particularly as assessed by the Modern Language Aptitude Test (Carroll and Sapon, 1959) involves verbal abilities, reasoning skills and memory abilities. We presume that it operates in second language learning because individual differences in such characteristics facilitate the acquisition of the code, or the cognitive aspects of the language. Motivation, on the other hand, is important because it provides the impetus for learning. The attitudinal components act as supports for this motivation and serve to maintain it during the long and arduous task of language learning.

In the socio-educational model, we distinguish between two types of language learning contexts, the formal language acquisition context and the informal language acquisition context. Formal language acquisition contexts refer to any formal language learning situation, in which the major purpose is instruction in the second language. The most obvious example is the language classroom. In many social contexts, this is, for all practical purposes, the only source for second language development. Informal language acquisition contexts refer to any other situation where there is an opportunity to experience the other language, but instruction is not a primary objective. Examples might be a French movie or television show, a French newspaper or book, contact with members of the other community, etc. Presumably, the individual enters such contexts for some communicational purpose. Language acquisition is secondary.

In the socio-educational model, it is assumed that language aptitude and motivation are important in both formal and informal language acquisition contexts, but that motivation is the primary

determinant of whether or not someone will even involve themselves in informal language acquisition contexts. That is, once someone is in a context, formal or informal, both aptitude and motivation are expected to influence the relative degree to which the individual learns the language, but motivation will determine whether or not individuals will avail themselves of the opportunities provided by informal contexts. Of course, if the formal language acquisition context is optional, motivation will also play a big role in whether or not the individual even enrolls in the program.

This model accounts for the various relationships reported in the factor analytic studies referred to earlier. It accounts for why measures of language aptitude tend to be independent of attitudinal/motivational measures, and why various measures of attitudes and motivation relate to each other and often form unitary factors. It explains, too, why measures of French achievement tend to relate to both the aptitude and the motivational factors and why in some contexts some language skills (particularly those involved in oral/aural communication) relate more to the motivational dimension than the aptitude one.

Recently, we have made use of causal modeling techniques, specifically LISREL (Jöreskog & Sörbom, 1984), to determine the adequacy of this causal model. LISREL is an acronym for Linear Structural Relations, and is similar to path analysis except that it allows for the identification of latent variables, and permits measurement error. Causation is defined in terms of a series of structural equations in which some latent variables are regressed on other latent variables. In many of our applications of LISREL, the measures of language aptitude,

attitudes and motivation are assessed early in the school year, and the indices of French achievement are obtained later in the year. In the basic model, we propose that Integrativeness and Attitudes toward the

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Insert Figure 2 about here

Learning Situation "cause" Motivation, and that both Aptitude and Motivation "cause" French Achievement. The goodness of fit indices associated with this model are acceptable, the various path coefficients are significant, and the relations of the measurements themselves (i.e., the indicator variables) to the latent variables (the measurement model) are clear and well defined. Tests of this basic model have been described by Gardner (1983) and Gardner, Lalonde and Pierson (1983), while an extension of this model that posits that personality variables "cause" the attitude variables in this chain of events has been presented by Lalonde and Gardner (1984). These causal models are, of course, still based on correlational data, but they do provide good fits to the correlations among the measures suggesting that this causal model is consistent with the correlations obtained. These tests, therefore, provide some assurance that the model as a whole is a reasonable one.

Specific Predictions of the Model

There are a number of specific predictions that derive from this model, and some of these have been tested. Three that I would like to discuss today are as follows:

(1) Motivation should play a major role in determining who would drop out and who would continue French language study once it were made optional.

Previous research conducted in California (Bartley, 1969; 1970) had demonstrated that drop-outs had significantly lower scores on measures of language aptitude and foreign language attitudes than students who did not drop out. We reasoned, therefore, that if we assessed students' attitudes, motivation, language aptitude and French achievement one year, and then determined whether they dropped out or continued studying French the next year, there would be differences between the Drop-outs and the Stay-ins. We investigated students in grades 9, 10, and 11. The results were very clear cut. At all three grade levels the largest differences (defined in terms of omega-squared statistics) between the Drop-outs and Stay-ins occurred on the index of Motivation (as defined previously) followed by that for Integrativeness. These two classes of variables were relatively more important at all three grade levels than either language aptitude, attitudes toward the learning situation, or suprisingly even French achievement (see Clément, Smythe & Gardner, 1978; Gardner, 1983). That is, motivation and integrative attitudes were the major determinants of whether or not students took advantage of the opportunity to learn French when it was optional.

(2) Attitudinal/motivational variables should determine how active students will be in the language classroom setting.

This hypothesis has been supported in three different studies. In two of them, Gliksman (1976) classified students as Integratively Motivated or Not Integratively Motivated based on tests administered during the first week of classes. He then observed students in class throughout the term. In the first study, he found that integratively motivated students volunteered more frequently, gave more correct

answers, and received more positive reinforcement from the teachers than those not so motivated. These results did not interact with sessions indicating that the differences were generally consistent throughout the term. Very similar results were obtained in a second study conducted by Gliksman using the same analytic procedure (see also Gliksman, Gardner & Smythe, 1982). Another study by Naiman, Fröhlich, Stern & Todesco (1978) using a correlational analysis and somewhat different observational measures obtained results that were comparable. Thus, it seems reasonable to argue that the integrative motive is important for language study because it orients individuals to play a more active role in the language learning process.

(3) Attitudinal/motivational variables are important as causal variables in language acquisition.

Perhaps the most troublesome aspect of our formulation is that of causation. We argue that language aptitude and motivation are important because they influence how quickly and how well students actually learn the second language, but of course all we have really done is to test causal models linking performance on various measures of second language achievement with aptitude and motivation. Recently we conducted a laboratory based study in which we brought university students registered in French into the laboratory to teach them a list of 25 relatively rare French words (Gardner, Lalonde & Moorcroft, 1985). We made use of a paired associate learning format in which an English word was presented, students were given time to provide the French equivalent, then the English-French pair was presented. In this way, we could monitor the students' rate of acquisition over the six trials. On the basis of prior testing students were classified as high or low on

language aptitude, and high or low on the integrative motive. The results of an analysis of variance were very clear cut, providing evidence that both language aptitude and integrative motivation influence rate of learning. Consider, for example, the results for the significant interaction between Integrative Motivation and Trials on the number of correct responses. The data indicated quite clearly that the rate of learning was faster for subjects classified as high in integrative motivation than for subjects low in integrative motivation. On trial 1, the means for the two groups were very comparable, and less

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Insert Figure 3 about here

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than 1 out of 25 (i.e., .50 for the High Integrative, and .20 for the Low Integrative students). By trial 6, there was a clear difference between the two groups. The mean for the High Integrative students was 15.25; the mean for the Low Integrative students was 12.60. Post hoc comparisons between the high and low integrative motive students at each trial showed that they did not differ significantly on Trials 1 and 2, but that they did on Trials 3 to 6. A significant Aptitude x Trials interaction was also obtained and the pattern of results were very similar. Although paired associate learning is a far cry from second language acquisition, and the laboratory setting quite different from the classroom environment, these results were clear in supporting the generalization that aptitude and motivation are important in second language learning because they causally influence how well (and how quickly) students learn the second language.

Implications

Our program of research indicates, I believe, that there is both an educational and a social psychological perspective in second language learning. Like any school subject, a second language represents material that must be learned and, as such, ability and motivational factors will play a role in the extent to which individuals learn the material. Unlike other school subjects, however, the second language represents behavior patterns and characteristics of members of another ethnolinguistic community, not one's own group, and therefore the motivational component will be influenced to some extent by factors that affect how readily the individual is willing to adopt these "foreign" behavior patterns. We have referred to these factors as integrative attitudes to indicate that they reflect the extent to which the individual is willing to come close psychologically to the other language group. In our research, we have focused attention on indices of integrativeness such as attitudes toward the other language group, to other groups in general, toward learning the language for integrative (i.e., social and communicational) purposes, etc., but many other types of measures could be included. The important point underlying the integrativeness concept is that language is a significant and very important part of one's own identity, and therefore that the acquisition of another language can be a threat to one's feelings of self. In fact, Taylor, Meynard and Rheault (1977) have shown that a measure of threat to ethnic identity correlated negatively with achievement in a second language, while Clément, Gardner & Smythe (1980) demonstrated that such perceptions of threat are negatively related to the integrative motive dimension.

In our research, we have also focused on another attitudinal concept, Attitudes toward the Learning Situation because we feel that reactions to this context can also influence a student's level of motivation to learn the second language. This may be especially true in regions where the student has little opportunity to experience the other language (ie.g., a monolingual region) since the classroom would represent the sole contact with that language. We hope this year to explore this hypothesis more closely.

The major operative construct in the socio-educational model is that of motivation. Although we have emphasized that this motivation is supported (or determined) by two attitudinal constructs (Integrativeness and Attitudes toward the Learning Situation), it is quite reasonable to assume that there may also be other determining factors. It is my personal view, however, that such other classes of variables would operate through their effects on motivation. In some of our earlier research, we included measures of language anxiety, and in some current research we are examining the precise role such anxiety plays and how it relates to the construct of motivation.

At the beginning of this paper, I stated that our research was not involved directly with bilingualism. Although this is true, I believe that our research and our theoretical model have implications for the development of bilingual competence. Moreover, although most of the research that I have referred to is concerned with second language courses as distinct from immersion or remedial programs, I do not think that this generalization should necessarily be seen to be restricted to only one context.

I suspect that the general principles outlined here would generalize to situations involving the "natural bilingual" where two languages are acquired relatively interchangeably in the home, or in the type of second language programs in which members of minority groups are educated in the language of the majority group. This is not to say that some modifications may not have to be made in the general model, or that some surprising findings may not appear, but I think that it is clear that aptitude and motivation are two major determinants of achievement in a second language which should be evidenced in any context. Conducting the research and measuring the attributes in a sufficiently sensitive manner to uncover the relationships is an interesting task, and one that I can strongly recommend to others.

In summary, it seems reasonable to propose that the learning of a second language involves both an ability and a motivation component. Furthermore, the major basis of this motivation seems best viewed from a social psychological perspective in that it involves the extent to which the individual is able or willing to identify with the other ethnolinguistic community. Language is an important part of one's own identity, and the extent to which one can incorporate another language successfully is related among other things to a host of attitudinal variables involving ethnic relations. The operative variable in this chain of events, however, is motivation, and it is quite possible that the cultural milieu in which language learning takes place will influence which attitudinal variables serve as basic supports for this motivation.

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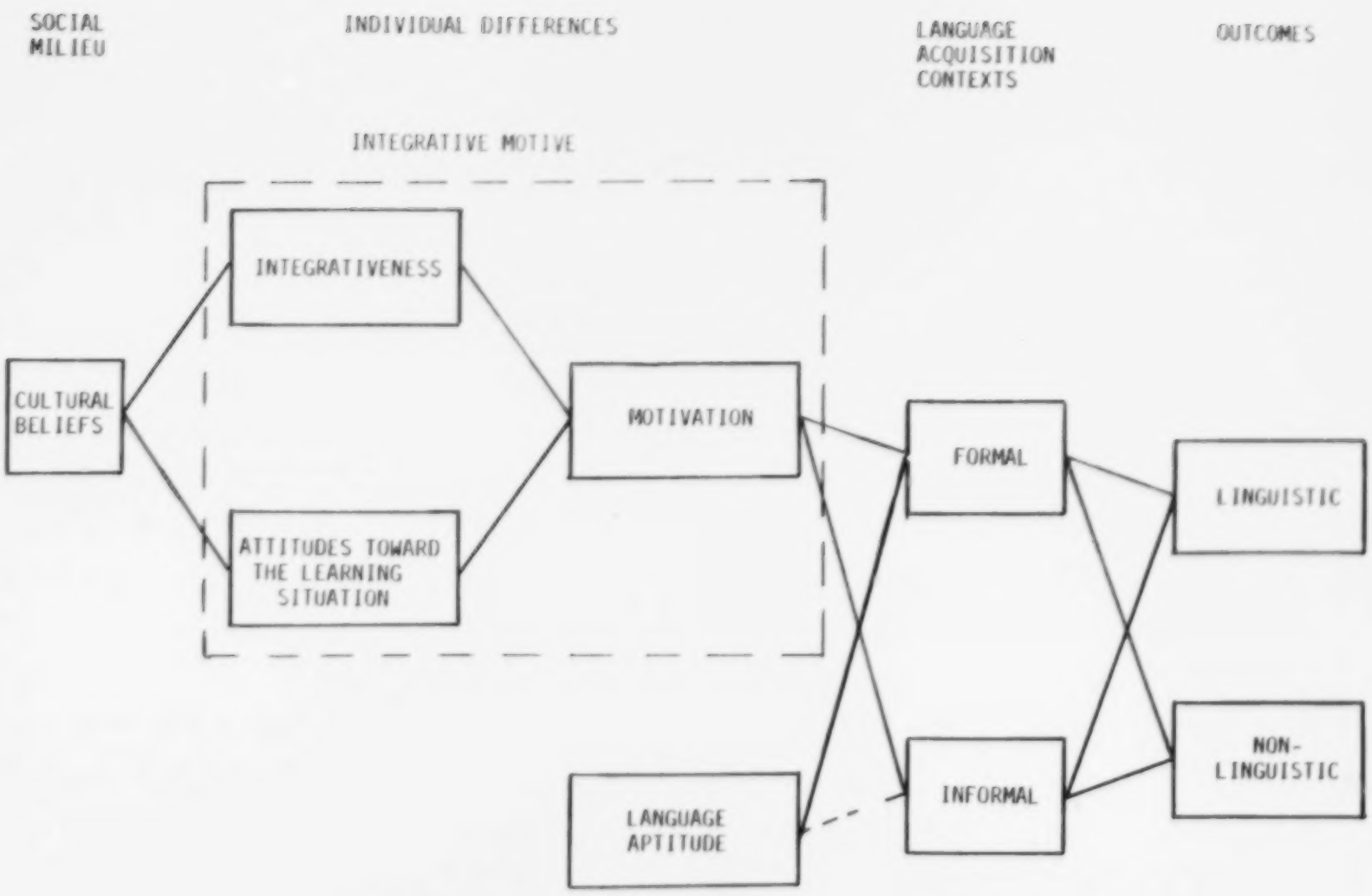

Figure 1. Operational Formulation of the Socio-Educational Model

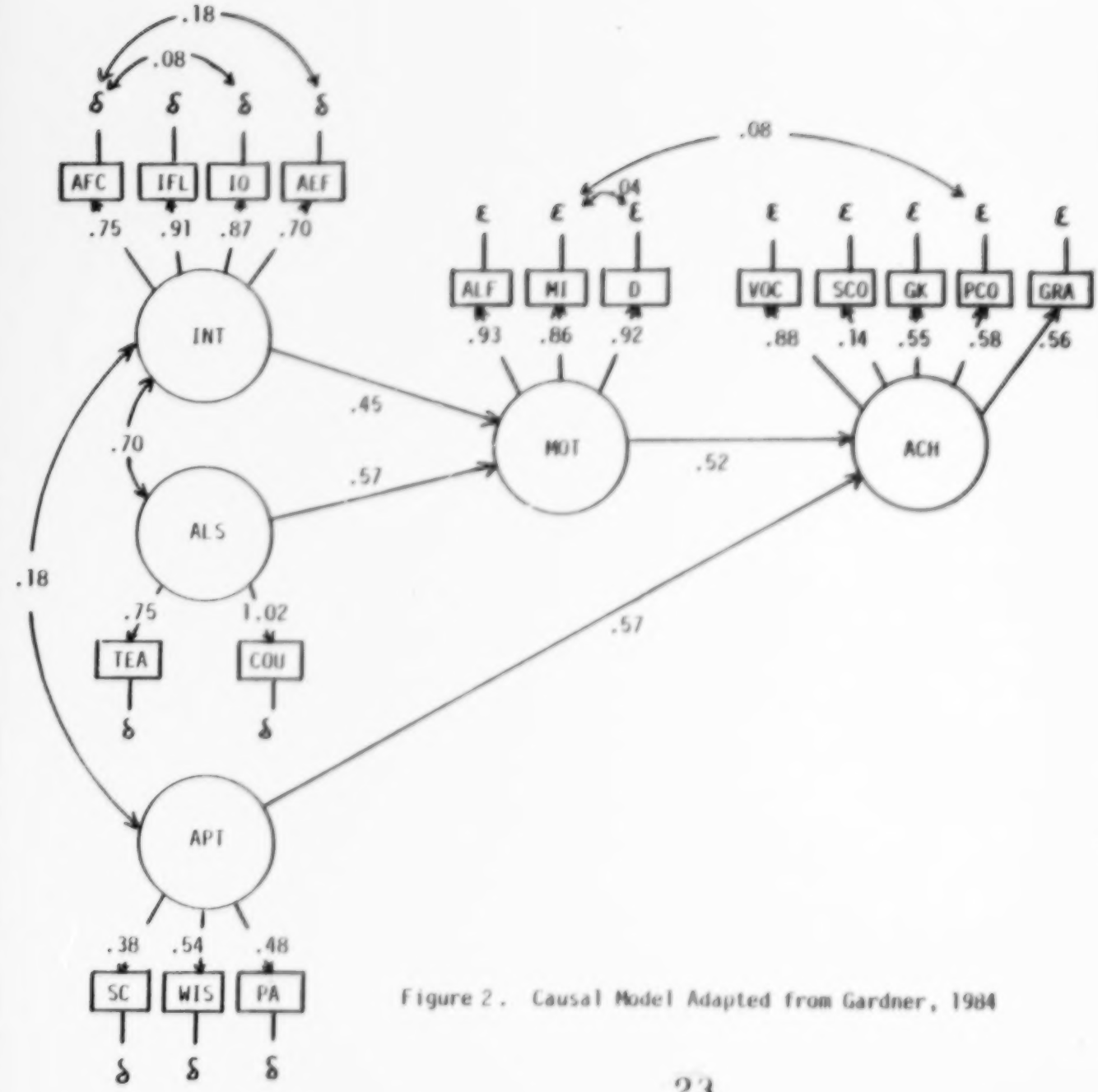

Figure 2. Causal Model Adapted from Gardner, 1984

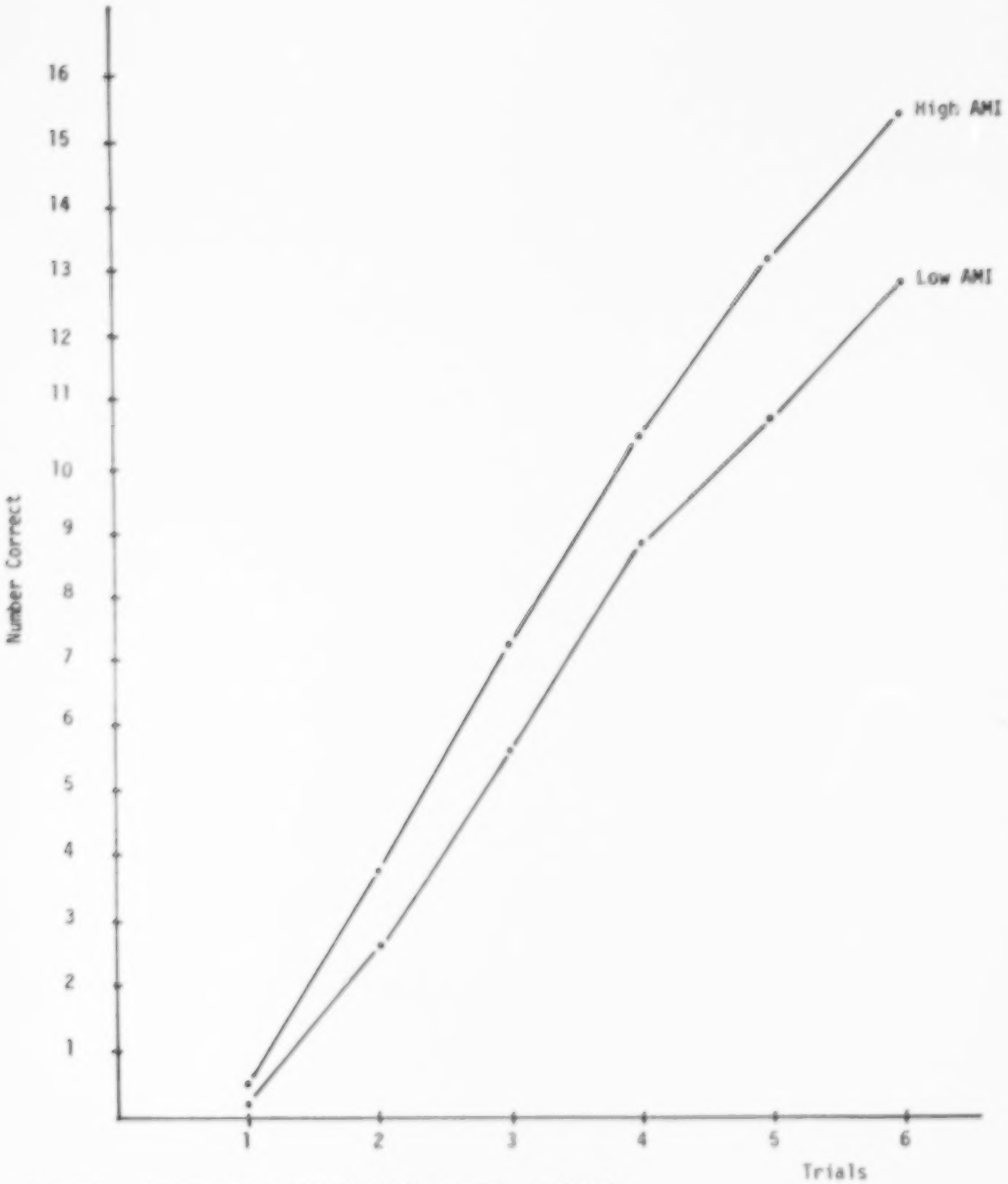

Figure 3. Interaction of Attitude/Motivation by Trials